

Abstract of the Disclosure

A rake receiver includes a radio receiving section, a first despreading section, a delay profile calculating section, a synchronization establishing and tracking section, a second despreading section and a demodulating section. The radio receiving section converts a received carrier signal into a spread baseband signal. The first despreading section calculates a correlation value signal from the spread baseband signal using a predetermined spreading code. The delay profile calculating section has an infinite impulse response (IIR) filter section functioning as a low pass filter, and calculates a delay profile from the correlation value signal using the infinite impulse response filter section. The synchronization establishing and tracking section detects phases of a selected path from the delay profile. The second despreading section despreads the baseband signal using the predetermined spreading code in response to each of the selected path phases to produce a despread baseband signal. The demodulating section demodulates the despread baseband signal into a data.